

**Marine molluscan taxa from Mozambique described by
G. G. Bianconi and preserved in the Zoological
Museum of the University of Bologna**

by

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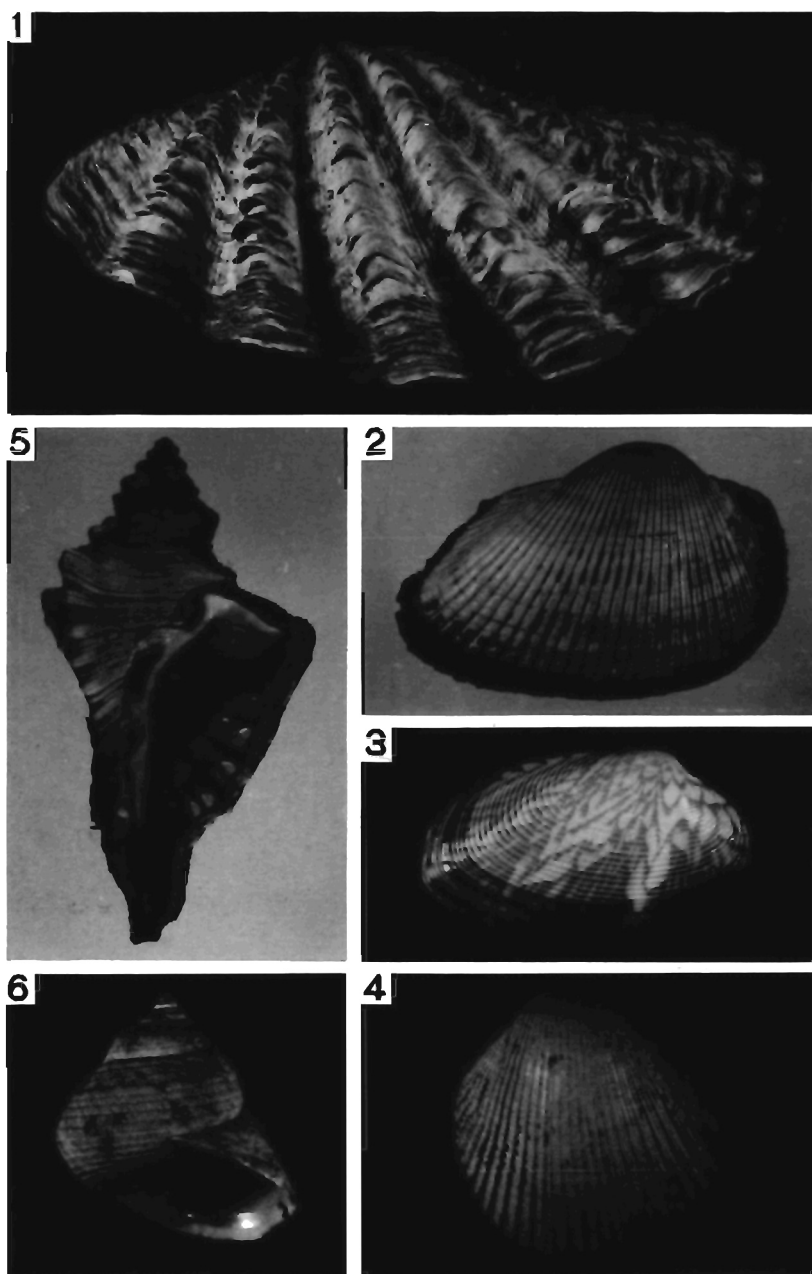
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ABSTRACT

The species of marine Mollusca from Mozambique described by G. G. Bianconi (1809–1878) between 1850 and 1869, and preserved in the 'Museo di Zoologia' of the University of Bologna, are discussed. *Arca mosambicana* Bianconi, 1856, and *Triton ranzanii* Bianconi, 1850, are valid species; *Venus variopicta* Bianconi, 1856 (= *Venus deshayesiana* Bianconi, 1856), is a synonym of *Tapes sulcarius* (Lamarck, 1818); *Cardium deshayesianum* Bianconi, 1856 (= *Cardium fornasinianum* Bianconi, 1856), is a synonym of *Fulvia papyracea* (Bruguière, 1789); *Tridacna elongatissima* Bianconi, 1856, is a synonym of *Tridacna maxima* (Röding, 1798); *Trochus lineolatus* Bianconi, 1865, is a synonym of *Priotrochus obscurus* (Wood, 1828). By invoking the 'principle of first reviser' the names *Venus variopicta* Bianconi, 1856, and *Cardium deshayesianum* Bianconi, 1856, are selected as senior synonyms of *Venus deshayesiana* Bianconi, 1856, and *Cardium fornasinianum* Bianconi, 1856, respectively. Where a single specimen is present it is considered to be the holotype and where there are more than one, a lectotype is designated. The holotype or lectotype of each species is illustrated and the type locality for all is restricted to Inhambane.

INTRODUCTION

A recent systematic study of the 'Collezione Mozambicana' housed in the 'Museo di Zoologia' of the University of Bologna, Italy (MZB), has revealed type material of taxa named by the Bolognese naturalist Giovanni Giuseppe Bianconi (1809–1878). Amongst these are six species of marine molluscs collected in Mozambique between 1831 and 1859, by the Bolognese tradesman Carlo Fornasini (1802–?). The original diagnoses of these taxa were presented by Bianconi himself at meetings of the Accademia delle Scienze dell'Istituto di Bologna and were subsequently published as concise notes in the proceedings of these meetings, the *Rendiconti delle Sessioni dell'Accademia delle Scienze*, between 1850 and 1869. They were also published in *Memorie dell'Accademia delle Scienze* as parts of the 'Specimina zoologica Mosambicana' (also 1850–1869) and finally assembled together in a monograph bearing the same name (Bianconi 1869b). The material was only localised to Mozambique, but following Kilburn (1983) we restrict all type localities to Inhambane, a locality at which Fornasini is known to have collected.



Figs 1–6. Bianconi's marine Mollusca from Mozambique. 1. Lectotype of *Tridacna elongatissima* Bianconi, 1856 (198 mm x 90 mm). 2. Lectotype of *Arca mosambicana* Bianconi, 1856 (107 mm x 68 mm). 3. Lectotype of *Venus deshayesiana* Bianconi, 1856 [= *V. variopicta* Bianconi, 1856] (88 mm x 50 mm). 4. Holotype of *Cardium fornasinianum* Bianconi, 1856 [= *C. deshayesianum* Bianconi, 1856] (57 mm x 55 mm). 5. Holotype of *Cymatium ranzani* Bianconi, 1850 (134 mm x 74 mm). 6. Lectotype of *Trochus lineolatus* Bianconi, 1865 (23 mm x 21.5 mm).

TAXONOMY

Tridacna elongatissima Bianconi, 1856

Fig. 1

Tridacna elongatissima Bianconi, 1856a: 41; *idem*, 1856b: 408, pl. 25, fig. 2; *idem*, 1869a: 199–222, pl. 4, fig. 1. Type loc.: Mozambique, here restricted to Inhambane.

Remarks: The original description mentioned two specimens, both of which remain in the MZB collection (complete). The smaller of the two was illustrated together with the description, and the larger one subsequently in a paper published in 1869, in the ‘Specimina zoologica’ as ‘Addenda et Corrigenda’ (Bianconi 1869a). Rosewater (1965) considered the illustration provided by Bianconi (1856) to represent a rather elongate specimen of *T. squamosa* Lamarck, 1819, with one or two additional radial folds, and he consequently placed *T. elongatissima* in synonymy with *T. squamosa*. This synonymy, however, is evidently erroneous. The larger of Bianconi’s two specimens (the one described in 1856) is clearly a specimen of *T. maxima* (Röding, 1798). Because of the slight element of doubt associated with the identity of the smaller specimen, we here select the larger one as lectotype (cat. number MZB 009876). The smaller one (cat. number MZB 009877) becomes a paralectotype.

Conclusion: A synonym of *Tridacna maxima* (Röding, 1798).

Arca mosambicana Bianconi, 1856

Fig. 2

Arca mosambicana Bianconi, 1856a: 41; *idem*, 1856b: 403, pl. 23, figs 1–2. Type loc.: Mozambique, restricted to Inhambane by Kilburn (1983).

Remarks: The MZB collection contains two complete shells (4 valves); the shell described by Bianconi (1856a) and illustrated by Bianconi (1856b) is here figured (Fig. 2) and designated lectotype (cat. number MZB 009867). The other specimen, indicated by Bianconi as ‘junior’, becomes a paralectotype (cat. number MZB 009868).

This species was discussed by Kilburn (1983), who referred it to the genus *Anadara* Gray, 1847, subgenus *Scapharca* Gray, 1847.

Conclusion: A valid species belonging to *Anadara* (*Scapharca*) Gray, 1847.

Venus variopicta Bianconi, 1856

Venus variopicta Bianconi, 1856a: 41. Type loc.: Mozambique, here restricted to Inhambane.

Remarks: This name was proposed by Bianconi (1856a), but in the same year he described the material again, using the identical Latin diagnosis (Bianconi 1856b), under the name *Venus deshaysiana* (see below). We have been unable to establish the precise dates of publication of the respective volumes of these journals and the issue of priority is unclear. To resolve this we invoke the ‘principle of first reviser’ (ICZN Art. 24) and select *Venus variopicta* as the senior name, recognising that the matter is to a large extent immaterial, since both are synonyms of an earlier name.

Venus deshaysiana Bianconi, 1856

Fig. 3

Venus deshaysiana Bianconi, 1856b: 406, pl. 24, figs 1–3. Type loc.: Mozambique, here restricted to Inhambane.

Remarks: The MZB collection contains six complete shells under this name; we select as lectotype the one illustrated and described as 'majoris individui' (cat. number MZB 009869). The other five shells are to be regarded as paralectotypes (cat. numbers MZB 009870–74).

Neither the name *variopicta* nor *deshayesiana* was discussed by Fischer-Piette & Métivier (1971) in their revision of the Tapetinae of the world. The types are clearly specimens of the well-known Indo-West Pacific *Tapes sulcarius* (Lamarck, 1818) and both Bianconi's names must therefore be relegated to synonymy.

Conclusion: A synonym of *Tapes sulcarius* (Lamarck, 1818).

Cardium deshayesianum Bianconi, 1856

Cardium deshayesianum Bianconi, 1856a: 41. Type loc.: Mozambique, here restricted to Inhambane.

Remarks: This name was used by Bianconi (1856a), but in the same year Bianconi described the material again using a nearly identical Latin diagnosis (Bianconi 1856b), under the name *Cardium fornasinianum* (see below). This situation parallels that described above for *Venus variopicta*. In this instance we select *Cardium deshayesianum* as the earlier name, but again the issue is of little consequence as a well established senior synonym exists.

Cardium fornasinianum Bianconi, 1856

Fig. 4

Cardium fornasinianum Bianconi, 1856b: 409, pl. 25, figs 1–1a. Type loc.: Mozambique, here restricted to Inhambane.

Remarks: The MZB collection contains a single specimen (two valves) which corresponds perfectly to the one described and illustrated by Bianconi (1856b). We consider it to be the holotype (cat. number MZB 009875). It is a typical example of *Fulvia papyracea* (Bruguère, 1789) and both *C. deshayesianum* and *C. fornasinianum* must be regarded as synonyms thereof. Fischer-Piette (1977) listed *C. fornasinianum* in the synonymy of *Fulvia aperta* (Bruguère, 1789) [as *Papyridea*], but the southern African material that he mentioned in connection with that species was incorrectly identified. *F. aperta* has a much wider posterior gape and does not occur in south-eastern Africa (cf. Kilburn & Rippey 1982).

Conclusion: A synonym of *Fulvia papyracea* (Bruguère, 1789).

Triton ranzanii Bianconi, 1850

Fig. 5

Triton ranzanii Bianconi, 1850: 42; *idem*, 1851: 17, pl. 3, figs 1–2; Emerson & D'Attilio, 1962; Sabelli, Taviani & Tomassini, 1979 (further references). Type loc.: Mozambique, here restricted to Inhambane.

Remarks: The MZB collection contains a single specimen, the holotype (cat. number MZB 009878). This has been discussed and figured by Sabelli *et al.* (1979). The history of the species and its relationships were discussed by Emerson & D'Attilio (1962), who confirmed that it should be referred to *Cymatium s.s.*

Conclusion: A valid species belonging to *Cymatium s.s.*

Trochus lineolatus Bianconi, 1865

Fig. 6

Trochus lineolatus (non Risso, 1826, non O. G. Costa, 1829); Bianconi, 1865a: 67; *idem*, 1865b: 524, pl. 1, figs 1–3; Pilsbry, 1889: 258. Type loc.: Mozambique, here restricted to Inhambane.

Remarks: This name is pre-occupied by *Trochus lineolatus* Risso, 1826, and *T. lineolatus* O. G. Costa, 1829. The MZB collection contains five shells, one of which agrees with the dimensions given by Bianconi (1865b). Accordingly, this specimen is designated lectotype (cat. number MZB 009879), the others becoming paralectotypes (cat. numbers MZB 009880–83).

Pilsbry (1889) listed this name in the synonymy of *Monilea* (*Priotrochus*) *obscurus* (Wood, 1828), and this was certainly justified. The latter is common in Mozambique and there is no other similar species occurring in the area with which Bianconi's material might be confused. Although the lectotype has obsolete shoulder nodules, the colour pattern, columella denticles and spiral ridges inside the outer lip are all typical of *obscurus*. Bianconi's figures likewise show no shoulder nodules, but some of the material available to him must have possessed them, as they are clearly mentioned in the original description ('carina superiori nodulifera').

Herbert (1988) recognised *Priotrochus* Fischer, 1879, at generic level and showed it to have little relationship with *Monilea* Swainson, 1840, and umboniine taxa in general, belonging instead to the Trochinae (cf. Hickman & Mclean 1990).

Conclusion: A synonym of *Priotrochus obscurus* (Wood, 1828).

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